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10/562,016	06/14/2006	Masaru Yamaoka	2005_2002A	2959
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,016

Applicant(s)

YAMAOKA ET AL.

Examiner

PINKAL CHOKSHI

Art Unit

2425

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/20/2009 with respect to claim 26 and 35 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, Applicant asserts that Davis does not disclose comparing the watermark data to an EPG acquired. Examiner respectfully disagrees. Davis discloses (§0011) that the watermark data is used to determine if the EPG data is updated and based on this check against EPG data, it updates EPG. Davis also discloses (§0021) that based on the updated EPG data, the unwanted programming can be identified and deleted.

Furthermore, Applicant alleges that Davis does not disclose to distinguish the unreserved program portion from the reserved program if the program content has no embedded watermark. Examiner respectfully disagrees. Davis discloses (§0010, §0011, §0034) that the unique watermark identifier is associated with each video program, such as breaking news.

See the new rejection below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 26-28, 31 and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over US PG Pub 2004/0078817 to Horowitz (hereafter referenced as Horowitz) in view of US PG Pub 2007/0294741 to Nejime (hereafter referenced as Nejime) and US PG Pub 2003/0028882 to Davis (hereafter referenced as Davis).

Regarding **claim 26**, "a program reservation-and-recording apparatus for recording a reserved program, from among a plurality of programs, in a recording medium using a program list including program identification information and describing a program time for each program of the plurality of programs, the program list being acquired from an information-providing server connected to the program reservation-and-recording apparatus via a network" reads on the device that records programs using program title and other information from EPG received from provider (abstract and ¶0018) disclosed by Horowitz and represented in Fig. 6.

As to "the program reservation-and-recording apparatus comprising: a reservation-information input section configured to accept reservation information which indicates the contents of a reservation for a program" Horowitz discloses (¶0021) that the viewer selects programs to be recorded on the client device using an input device such as remote control as represented in Fig. 1.

As to "a reservation-information memory for storing reservation information including program identification information" Horowitz discloses (¶0021, ¶0026, ¶0027) that the viewer's request, to record the specific program

title using EPG, is stored in an event programs table of the device as represented in Fig. 3 (element 312).

As to “a recording control section configured to record the reserved program in the recording medium, based on the reservation information” Horowitz discloses (§0061) that the processor controls the operations of client device including memory where program contents are being stored as represented in Fig. 8 (element 804).

As to “a program-list acquisition section configured to request and acquire the program list from the information-providing server” Horowitz discloses (§0018) that the transmission application, stored in the memory of client device, requests and receives an updated program schedule information having program data matching to the program data of the request to record the program from the content distribution system via broadcast network as represented in Fig. 6.

As to “a reservation-information update section configured to update the reservation information stored in the reservation-information memory based on the acquired program list” Horowitz discloses (§0028) that the updated EPG data is provided to client device that updates EPG data stored in the client device.

As to “wherein the program-list acquisition section acquires the program list at least at a time immediately before a program-recording completion time described in the reservation information” Horowitz discloses (§0028) that the device requests and receives updated EPG list immediately before the end of the originally scheduled time program.

As to “wherein the recording control section records an entire reserved program based on the program list acquired at the time immediately before the program-recording completion time” Horowitz discloses (§¶0028 and §¶0030) that based on the updated program information received immediately before the scheduled end time, user requested programs are recorded entirely on the device.

As to “an erasure control section configured to extract and erase an unreserved program portion in the recording medium based on the program list and the address table, wherein the erasure control section erases an unreserved program portion preceding the reservation program in the recording medium based on the program list acquired at the time immediately before the program-recording completion time and the program identification information included in the reservation information stored in the reservation information memory” Horowitz discloses (§¶0028, §¶0030, §¶0032) that based on the updated EPG information received prior to the scheduled end of programming event, client device determines if the program is sporting event (program identification information) and if it's not sporting event then it terminates recording of the program as represented in Fig. 4.

Horowitz meets all the limitations of the claim except “create an address table which manages the recording position of the recorded program associated with the program identification information.” However, Nejime discloses (§¶0046, §¶0049) that the recording control table is created that manages information such

as a recording location/address in the storage device indicating the area for storing the program as represented in Fig. 6. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz's system by creating a table that indicates recording position of the program as taught by Nejime in order to easily locate the program for future playback (§0049).

Combination of Horowitz and Nejime meets all the limitations of the claim except "erase an unreserved program portion preceding the reservation program in the recording medium based on the updated program list acquired and the address table." However, Davis discloses (§0015-§0020) that based on the updated program list, device deletes an unwanted program material recorded before the scheduled program. Davis further discloses (§0021) that the unscheduled program is deleted by using a table with the list of unwanted programs recorded on the device. Davis further discloses (§0011) that the watermark data is used to determine if the EPG data is updated and based on this check against EPG data, it updates EPG. Davis also discloses (§0021) that based on the updated EPG data, the unwanted programming can be identified and deleted. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz and Nejime's systems by erasing unwanted program portion recorded before the scheduled program from the recording medium as taught by Davis in order to present only the program list

that user actually requested to record and also allow more programming time on the storage device.

Regarding **claim 27**, "a program reservation-and-recording apparatus wherein the recording control section includes an address table storing section which stores an address table having recording medium identification information of the recording medium in which at least a name of the reserved program is recorded" Horowitz discloses (§¶0018) that the device receives a request to record a program, where the request corresponds to a program data that includes a channel number, a program title, start/end time, etc.

As to "wherein the erasure control section is configured to erase the unreserved program portion in the recording medium on a basis of the program list and the address table stored in the address table storing section" Horowitz discloses (§¶0018) that the program is being recorded on the device based on the request received. Horowitz further discloses (§¶0028, §¶0030, §¶0032) that based on the updated EPG information received, client device will not record program that was not requested by the viewer and will only record the program that was requested by the viewer as represented in Fig. 4.

Combination of Horowitz and Nejime meets all the limitations of the claim except "erase an unreserved program portion in the recording medium." However, Davis discloses (§¶0015-§¶0020) that based on the updated program list, device deletes an unwanted program material recorded before the scheduled

program. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz's system by erasing unwanted program portion recorded before the scheduled program from the recording medium as taught by Davis in order to present only the program list that user actually requested to record and also allow more programming time on the storage device.

Regarding **claim 28**, "a program reservation-and-recording apparatus wherein at least one of a program recording start time and a program recording completion time is described in the address table" Horowitz discloses (§10018) that the device receives a request to record a program, where the request corresponds to a program data that includes a channel number, a program title, start/end and duration time, etc.

As to "wherein the erasure control section is further configured to determine if the unreserved program portion is recorded in the recording medium using at least one of the program recording start time and the program recording completion time" Horowitz discloses (§10029 and §10030) that based on the start/end time of the scheduled program, device determines if unscheduled program is inserted before/end or during the scheduled show.

Regarding **claim 31**, "the program reservation-and-recording apparatus wherein the program-list acquisition section further acquires the program list at a

time when a program reservation is made in the reservation-information input section and at a time subsequent to it" Horowitz discloses (§0031) that the EPG data updates is performed prior to, at the start of, during, and at the end of the originally scheduled recording time.

As to "wherein the program list includes a program identifier, which is a code for identifying a program, for each program of the plurality of programs" Horowitz discloses (§0018) that the EPG includes a program title that identifies a program as represented in Fig. 4.

As to "wherein the reservation-information input section includes a program-identifier extraction section configured to extract the program identifier which corresponds to the reserved program from the program list acquired at the time when the program is reserved, and configured to store the program identifier as a part of the reservation information in the reservation- information memory, and wherein the reservation-information update section is further configured to compare the program identifier of the program for which the reservation is made and a program identifier in the program list acquired after the time when the reservation is made" Horowitz discloses (§0018) that the program data includes channel id, program title, and other information. Based on the request received from client device, transmission application in the client device matches an updated event schedule having program data with the program data of the request to record the program to receive and store updated program event schedule in the device.

Regarding **claim 34**, "a program reservation-and-recording system comprising: a plurality of the program reservation-and-recording apparatuses" Horowitz discloses (§10040) that the multiple client devices are coupled to the content distribution system via a broadcast network as represented in Fig. 6 (elements 108n).

As to "an information-providing server connected via a network to the plurality of program reservation-and-recording apparatuses, the information-providing server being configured to send the program list to respective program reservation-and-recording apparatuses of the plurality of program reservation-and-recording apparatuses in response to a request" Horowitz discloses (§10040) that the content distribution system is connected to multiple client device via broadcast network as represented in Fig. 6 (element 106). Horowitz further discloses (§10043) that the EPG data is transmitted to client devices using broadcast network.

4. **Claims 29 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime and Davis as applied to claim 26 above, and further in view of US PG Patent 6,108,002 to Ishizaki (hereafter referenced as Ishizaki).

Regarding **claim 29**, "a program reservation-and-recording apparatus further comprising wherein the erasure control section is further configured to determine, on a basis of the reservation information and the program list, if the

unreserved program portion is recorded within a program-recording time" Horowitz discloses (§§0029-§0030) that device determines whether the unscheduled conflicting program is scheduled to air during the scheduled program timing.

As to "a reservation statistical information acquire section configured to acquire reservation statistical information from a program-reservation information management server, wherein the reservation information memory stores reservation information on a basis of the reservation statistical information acquired by the reservation statistical acquire section" Horowitz discloses (§0027) that the viewer's request to record the program is stored in an event programs table of the device as represented in Fig. 3 (element 312).

Combination of Horowitz, Nejime, and Davis meets all the limitations of the claim except "acquire reservation statistical information from a server." However, Ishizaki discloses (col.8, line 46-col.9, line 44) that the program reservation information receiving unit receives reservation information from the server as represented in Fig. 10 (element 1003). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz, Nejime, and Davis' systems by transmitting reservation information to receiver as taught by Ishizaki in order to provide user with correct information of number of reservation made for chargeback purposes.

Regarding **claim 30**, "a program reservation-and-recording apparatus

wherein the reservation statistical information is a ranking of a number of reservations obtained by summing the number of the reservations of a program collected by the program reservation information management server" Horowitz discloses (¶0037) that the programs can be selected to their priority for recording in the client device.

Combination of Horowitz, Nejime, and Davis meets all the limitations of the claim except "ranking of a number of reservations obtained by summing the number of the reservations of a program collected by the server." However, Ishizaki discloses (col.8, line 46-col.9, line 44) that the calculation unit calculates the number of reservations made by user displayed in the reservation table as represented in Figs. 11 and 12. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz, Nejime, and Davis' systems by transmitting reservation information to receiver as taught by Ishizaki in order to provide user with correct information of number of reservation made for chargeback purposes.

5. **Claim 32** is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime and Davis as applied to claim 26 above, and further in view of US PG Pub 2005/0204388 to Knudson et al (hereafter referenced as Knudson).

Regarding **claim 32**, "the program reservation-and-recording apparatus wherein a time when the program-list acquisition section further acquires the program list at a time when a program reservation is made in the reservation-

information input section” Horowitz discloses (§§0029 and §0031) that the EPG data updates is performed prior to, at the start of, during, or at the end of the originally scheduled recording time by using user input device.

As to “wherein the program list includes a program identifier, which is a code for identifying a program, for each program of the plurality of programs” Horowitz discloses (§0018) that the EPG includes a program title that identifies a program as represented in Fig. 4.

Combination of Horowitz, Nejime, and Davis meets all the limitations of the claim except “wherein the program identifier includes an identifier for identifying if a corresponding program is a final one of serial programs.” However, Knudson discloses (§0058) that the client device is notified about the last episode of the matching requested program. As to “wherein the reservation-information update section is further configured to erase the contents of a periodic recording reservation for the serial programs from the reservation information, based on the program identifier, after a recording of the final program is completed” Knudson discloses (§0058) that the reminders will end after the last episode of the series. Knudson further discloses (§0067) that the device removes an existing reminder for the program by updating reservation of a program. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz and Davis’s systems by identifying the last episode of the program and removing the reminder as taught

by Knudson in order to stop the recording device from recording at the end of the program series (§0007).

6. **Claims 33** is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime and Davis as applied to claim 26 above, and further in view of US PG Pub 2002/0044764 to Akamatsu (hereafter referenced as Akamatsu).

Regarding **claim 33**, combination of Horowitz, Nejime, and Davis meets all the limitations of the claim except "the program reservation-and-recording apparatus further comprising: an apparatus-identifier memory configured to store an apparatus identifier for identifying the program reservation-and-recording apparatus itself." However, Akamatsu discloses (§0101 and §0117) that the reservation data management sections stores data that includes an ID unique to the client device as represented in Fig. 4 (elements 413, 423). As to "an apparatus-identifier transmission section configured to transmit the apparatus identifier to the information-providing server when communication is executed between the program reservation-and-recording apparatus and the information-providing server" Akamatsu discloses (§0116) that the input device transmits information including device ID required for preparing reservation data to the reservation section of the main device as represented in Fig. 4. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz, Nejime, and Davis' systems by using device ID to

transmit/receive updated EPG content as taught by Akamatsu in order to receive accurate update about the user requested programming.

7. **Claims 35-37, 40, and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime and Davis as applied to claim 26 above, and further in view of US Patent 6,951,031 to Hatano (hereafter referenced as Hatano).

Regarding **claim 35**, "a program reservation-and-recording apparatus for recording a reserved program, from among a plurality of programs, in a recording medium using a program list describing a program time for each program of the plurality of programs, the program list being acquired from an information-providing server connected to the program reservation-and-recording apparatus via a network and including at least program identification information, a start time, and a completion time, for each programs" reads on the device that records programs using program title and other information from EPG received from provider (abstract and ¶0018) disclosed by Horowitz and represented in Fig. 6.

As to "the program reservation-and-recording apparatus comprising: a reservation-information input section configured to accept reservation information which is based on the program list and indicates the contents of a reservation for a program" Horowitz discloses (¶0018 and ¶0021) that the viewer selects programs, based on the EPG, to be recorded on the client device using an input device such as remote control as represented in Fig. 1.

As to "a reservation-information memory for storing reservation information including program identification information" Horowitz discloses (§§0021, §§0026, §§0027) that the viewer's request, to record the specific program title using EPG, is stored in an event programs table of the device as represented in Fig. 3 (element 312).

As to "a recording control section configured to record the reserved program in the recording medium, based on the reservation information" Horowitz discloses (§§0061) that the processor controls the operations of client device including memory where program contents are being stored as represented in Fig. 8 (element 804).

As to "a program-list acquisition section configured to request and acquire the program list from the information-providing server at least at a time after a program- recording completion time described in the reservation information" Horowitz discloses (§§0018) that the transmission application, stored in the memory of client device, requests and receives an updated program schedule information having program data matching to the program data of the request to record the program from the content distribution system via broadcast network as represented in Fig. 6.

As to "a reservation-information update section configured to update the reservation information stored in the reservation-information memory based on the acquired program list" Horowitz discloses (§§0028) that the updated EPG data is provided to client device that updates EPG data stored in the client device.

As to "wherein an actual program time of the reserved program and program identification information of the reserved program are described in chronological order in the program list acquired at the time after the program-recording completion time" Horowitz discloses (§§0032) that the EPG update service provides updated scheduling information about programs to be recorded after schedule end of program in chronological order as represented in Fig. 4.

As to "an erasure control section configured to determine, based on the program list acquired at the time after the program-recording completion time, if an unreserved program portion is stored within the recording of the reserved program in the recording medium, and configured to extract and erase the unreserved program portion in the recording medium based on the program list and the address table" Horowitz discloses (§§0028, §§0030, §§0032) that based on the updated EPG information received prior to the scheduled end of programming event, client device determines if the program is sporting event (program identification information) and if it's not sporting event then it terminates recording of the program as represented in Fig. 4.

Horowitz meets all the limitations of the claim except "create an address table which manages the recording position of the recorded program associated with the program identification information." However, Nejime discloses (§§0046, §§0049) that the recording control table is created that manages information such as a recording location/address in the storage device indicating the area for storing the program as represented in Fig. 6. Therefore, it would have been

obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz's system by creating a table that indicates recording position of the program as taught by Nejime in order to easily locate the program for future playback (§¶0049).

Combination of Horowitz and Nejime meets all the limitations of the claim except "erase an unreserved program portion preceding the reservation program in the recording medium based on the updated program list acquired and the address table." However, Davis discloses (§¶0015-§¶0020) that based on the updated program list, device deletes an unwanted program material recorded before the scheduled program. Davis further discloses (§¶0021) that the unscheduled program is deleted by using a table with the list of unwanted programs recorded on the device. Davis further discloses (§¶0011) that the watermark data is used to determine if the EPG data is updated and based on this check against EPG data, it updates EPG. Davis also discloses (§¶0021) that based on the updated EPG data, the unwanted programming can be identified and deleted.

As to "a program division section to divide the reserved program stored in the recording medium, based on comparison between the program identification information included in the reservation information stored in the reservation-information memory and the program identification information of the program list acquired at the time after the program-recording completion time" Horowitz discloses (§¶0028) that the updated EPG data is received at the end of scheduled

programming. However, Davis discloses (§0021) that programs, including unwanted program, recorded on the storage device are displayed as a table, where the updated EPG data is used to identify the unwanted program. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz and Nejime's systems by erasing unwanted program portion recorded before the scheduled program from the recording medium as taught by Davis in order to present only the program list that user actually requested to record and also allow more programming time on the storage device.

Combination of Horowitz, Nejime and Davis meets all the limitations of the claim except "divide the reserved program stored in the recording medium within a program-recording time in accordance with the program identification information described in the program list in a chronological order." However, Hatano discloses (col.13, lines 15-35; col.16, line 64-col.17, line 3) that the programs recorded on the hard drive are displayed to the user according the date and time they were recorded as represented in Fig. 14A and Fig. 17 (element S60). Hatano further discloses (col.14, lines 20-28) that the recorded programs are singled out based on the file name and reproduced as represented in Fig. 14B. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz, Nejime and Davis' systems by separating the reserved programs stored in the device as taught by Hatano in

order to accurately present recorded programs without any difficulties and also to easily access the specific programming content (col.1, lines 48-50).

Regarding **claim 36**, "a program reservation-and-recording apparatus wherein the recording control section includes an address table storing section which stores an address table having recording medium identification information of the recording medium in which at least a name of the reserved program is recorded" Horowitz discloses (§¶0018) that the device receives a request to record a program, where the request corresponds to a program data that includes a channel number, a program title, start/end time, etc.

As to "wherein the erasure control section is configured to erase the unreserved program portion in the recording medium on a basis of the program list and the address table stored in the address table storing section" Horowitz discloses (§¶0018) that the program is being recorded on the device based on the request received. Horowitz further discloses (§¶0028, §¶0030, §¶0032) that based on the updated EPG information received, client device will not record program that was not requested by the viewer and will only record the program that was requested by the viewer as represented in Fig. 4.

Combination of Horowitz and Nejime meets all the limitations of the claim except "erase an unreserved program portion in the recording medium." However, Davis discloses (§¶0015-§¶0020) that based on the updated program list, device deletes an unwanted program material recorded before the scheduled

program. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz's system by erasing unwanted program portion recorded before the scheduled program from the recording medium as taught by Davis in order to present only the program list that user actually requested to record and also allow more programming time on the storage device.

Regarding **claim 37**, "a program reservation-and-recording apparatus wherein at least one of a program recording start time and a program recording completion time is described in the address table" Horowitz discloses (§10018) that the device receives a request to record a program, where the request corresponds to a program data that includes a channel number, a program title, start/end and duration time, etc.

As to "wherein the erasure control section is further configured to determine if the unreserved program portion is recorded in the recording medium using at least one of the program recording start time and the program recording completion time" Horowitz discloses (§10029 and §10030) that based on the start/end time of the scheduled program, device determines if unscheduled program is inserted before/end or during the scheduled show.

Regarding **claim 40**, "the program reservation-and-recording apparatus wherein the program-list acquisition section further acquires the program list at a

time when a program reservation is made in the reservation-information input section and at a time subsequent to it" Horowitz discloses (§0031) that the EPG data updates is performed prior to, at the start of, during, and at the end of the originally scheduled recording time.

As to "wherein the program list includes a program identifier, which is a code for identifying a program, for each program of the plurality of programs" Horowitz discloses (§0018) that the EPG includes a program title that identifies a program as represented in Fig. 4.

As to "wherein the reservation-information input section includes a program-identifier extraction section configured to extract the program identifier which corresponds to the reserved program from the program list acquired at the time when the program is reserved, and configured to store the program identifier as a part of the reservation information in the reservation- information memory, and wherein the reservation-information update section is further configured to compare the program identifier of the program for which the reservation is made and a program identifier in the program list acquired after the time when the reservation is made" Horowitz discloses (§0018) that the program data includes channel id, program title, and other information. Based on the request received from client device, transmission application in the client device matches an updated event schedule having program data with the program data of the request to record the program to receive and store updated program event schedule in the device.

Regarding **claim 43**, "a program reservation-and-recording system comprising: a plurality of the program reservation-and-recording apparatuses" Horowitz discloses (§10040) that the multiple client devices are coupled to the content distribution system via a broadcast network as represented in Fig. 6 (elements 108n).

As to "an information-providing server connected via a network to the plurality of program reservation-and-recording apparatuses, the information-providing server being configured to send the program list to respective program reservation-and-recording apparatuses of the plurality of program reservation-and-recording apparatuses in response to a request" Horowitz discloses (§10040) that the content distribution system is connected to multiple client device via broadcast network as represented in Fig. 6 (element 106). Horowitz further discloses (§10043) that the EPG data is transmitted to client devices using broadcast network.

8. **Claims 38 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime, Davis and Hatano as applied to claim 35 above, and further in view of Ishizaki.

Regarding **claim 38**, "wherein the erasure control section is further configured to determine, on a basis of the reservation information and the program list, if the unreserved program portion is recorded within the program-

recording time" Horowitz discloses (§0029-§0030) that device determines whether the unscheduled conflicting program is scheduled to air during the scheduled program timing.

As to "a program reservation-and-recording apparatus further comprising a reservation statistical information acquire section configured to acquire reservation statistical information from a program-reservation information management server, wherein the reservation information memory stores reservation information on a basis of the reservation statistical information acquired by the reservation statistical acquire section" Horowitz discloses (§0027) that the viewer's request to record the program is stored in an event programs table of the device as represented in Fig. 3 (element 312).

Combination of Horowitz, Nejime, Davis and Hatano meets all the limitations of the claim except "acquire reservation statistical information from a server." However, Ishizaki discloses (col.8, line 46-col.9, line 44) that the program reservation information receiving unit receives reservation information from the server as represented in Fig. 10 (element 1003). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz, Nejime, Davis and Hatano's systems by transmitting reservation information to receiver as taught by Ishizaki in order to provide user with correct information of number of reservation made for chargeback purposes.

Regarding **claim 39**, "a program reservation-and-recording apparatus wherein the reservation statistical information is a ranking of a number of reservations obtained by summing the number of the reservations of a program collected by the program reservation information management server" Horowitz discloses (§10037) that the programs can be selected to their priority for recording in the client device.

Combination of Horowitz, Nejime, Davis and Hatano meets all the limitations of the claim except "ranking of a number of reservations obtained by summing the number of the reservations of a program collected by the server." However, Ishizaki discloses (col.8, line 46-col.9, line 44) that the calculation unit calculates the number of reservations made by user displayed in the reservation table as represented in Figs. 11 and 12. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to modify Horowitz, Nejime, Davis and Hatano's systems by transmitting reservation information to receiver as taught by Ishizaki in order to provide user with correct information of number of reservation made for chargeback purposes.

9. **Claim 41** is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime, Davis and Hatano as applied to claim 35 above, and further in view of Knudson.

Regarding **claim 41**, “the program reservation-and-recording apparatus wherein a time when the program-list acquisition section further acquires the program list at a time when a program reservation is made in the reservation-information input section” Horowitz discloses (§§0029 and §0031) that the EPG data updates is performed prior to, at the start of, during, or at the end of the originally scheduled recording time by using user input device.

As to “wherein the program list includes a program identifier, which is a code for identifying a program, for each program of the plurality of programs” Horowitz discloses (§0018) that the EPG includes a program title that identifies a program as represented in Fig. 4.

Combination of Horowitz, Nejime, Davis and Hatano meets all the limitations of the claim except “wherein the program identifier includes an identifier for identifying if a corresponding program is a final one of serial programs.” However, Knudson discloses (§0058) that the client device is notified about the last episode of the matching requested program. As to “wherein the reservation-information update section is further configured to erase the contents of a periodic recording reservation for the serial programs from the reservation information, based on the program identifier, after a recording of the final program is completed” Knudson discloses (§0058) that the reminders will end after the last episode of the series. Knudson further discloses (§0067) that the device removes an existing reminder for the program by updating reservation of a program. Therefore, it would have been obvious to one of the ordinary skills in

the art at the time of the invention to modify Horowitz, Nejime, Davis and Hatano's systems by identifying the last episode of the program and removing the reminder as taught by Knudson in order to stop the recording device from recording at the end of the program series (§0007).

10. **Claim 42** is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz in view of Nejime, Davis and Hatano as applied to claim 35 above, and further in view of Akamatsu.

Regarding **claim 42**, combination of Horowitz, Nejime, Davis and Hatano meets all the limitations of the claim except "the program reservation-and-recording apparatus further comprising: an apparatus-identifier memory configured to store an apparatus identifier for identifying the program reservation-and-recording apparatus itself." However, Akamatsu discloses (§0101 and §0117) that the reservation data management sections stores data that includes an ID unique to the client device as represented in Fig. 4 (elements 413, 423). As to "an apparatus-identifier transmission section configured to transmit the apparatus identifier to the information-providing server when communication is executed between the program reservation-and-recording apparatus and the information-providing server" Akamatsu discloses (§0116) that the input device transmits information including device ID required for preparing reservation data to the reservation section of the main device as represented in Fig. 4. Therefore, it would have been obvious to one of the ordinary skills in the art at the time of

the invention to modify Horowitz, Nejime, Davis, and Hatano's systems by using device ID to transmit/receive updated EPG content as taught by Akamatsu in order to receive accurate update about the user requested programming.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 7,003,213 to Hasegawa.
- US PG Pub 2004/0078811 to Urdang.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PINKAL CHOKSHI whose telephone number is (571) 270-3317. The examiner can normally be reached on Monday-Friday 8 - 5 pm (Alt. Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pinkal Chokshi/
Examiner, Art Unit 2425

/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2425